

PROCEEDINGS OF THE NEW YORK ENTOMOLOGICAL SOCIETY.

MEETING OF FEBRUARY 18.

A regular meeting of the New York Entomological Society was held at 8:00 P.M., February 18, 1919, in the American Museum of Natural History, President L. B. Woodruff in the chair, with 18 members and two visitors present.

The following active members were elected: Lt. Willard J. Chamberlin, Oregon Exp. Sta., Corvallis, Oregon; Morton R. Peck, M.D., Cornwall-on-the-Hudson, N. Y.; J. W. Smith, 212 Madison Ave., Paterson, N. J.; Waldo Kortright, 123 May St., Hawthorne, N. J.

Dr. Lutz exhibited *Memoirs III*, N. S., Am. Mus., N. H., Oct., 1918, containing "Illustrations of the N. Am. Sp. of the gen. *Catocala*" with extraordinary profusion of colored plates, possibly the most sumptuous volume of American entomology published.

A photograph of Dr. A. Fenyés, of Pasadena, was received. Papers on the legs of insects were read by Mr. Barber (Hemiptera), Dr. Lutz (honey bee), Mr. Schott (*Calotarsa* ♂), Dr. Felt (Gall Midges), and were freely discussed by the members; Mr. Sturtevant, present as a visitor, referring especially to the mutations observed in legs of *Drosophila*, Dr. Lutz to the so-called "sex combs," and Dr. Bequaert to the paucity of interesting adaptations in legs of Diptera as compared with those of Hymenoptera, excepting always the pulvillus on the foot of the fly, of which he spoke at some length.

Lt. Chamberlin described the conditions under which his work in the Air Service had been performed in France and of his few opportunities for collecting there and in Italy.

MEETING OF MARCH 4.

A regular meeting of the New York Entomological Society was held at 8:00 P.M., in the American Museum of Natural History on March 4, 1919, President L. B. Woodruff in the chair, with 19 members present.

Mr. Davis presented \$100.00 to the Society, which at his suggestion was on motion of Mr. Sherman added to the Permanent Fund.

The donation was greeted by applause and a formal vote of thanks to Mr. Davis.

Mr. Leng announced the death on March 2, in his eightieth year, of Edward Doubleday Harris, Vice-President of the Society, and moved that a minute be hereby entered expressing the regret of the Society and that a suitable obituary notice be printed in the JOURNAL,—carried.

Mr. Davis showed a male and female cicada, *Tibicen bermudina* Verrill, from the Bermuda Islands and our native *Tibicen lyricen* DeGeer. These two species closely resemble each other, though distinct, and *bermudina* is prob-

ably the result of a stray *lyricen* having reached the Island at some remote period. He further stated that in *Tibicen biconica* we had a species found in Cuba, the Bahama Islands and southern Florida. He also showed a male cotype of *Okanagana arctostaphyla* Van D., a male and female *Okanagana rubrovenosa* and a pair of *Okanagana mariposa* from Lake Co., California, collected by Dr. F. E. Blaisdell. But two specimens of this last species had heretofore been examined, both from Mariposa Co., Calif.

Mr. Davis also exhibited *Stagmomantis floridanis* and called attention to errors in the title printed beneath the plate figures in the Brooklyn Bulletin.

Mr. Notman read a paper, "Records and New Species of Carabidæ," which will be printed in the JOURNAL.

Mr. Gaudin exhibited a large number of insects that he had collected in California in 1918. He read an account from the *Greensboro Daily News* of his experiences in North Carolina on his journey westward which is printed in Miscellaneous Notes. Among the many interesting insects shown were two specimens of *Ulochates leoninus* found on a pine in California, beneath the bark of which were the fragments of many more, and a small Monarch butterfly, captured locally, spreading only 68 mm.

Dr. Felt spoke briefly in regard to the European corn borer, *Pyrausta nubilalis* Hübn., calling attention to its discovery in this State the very last of January of this year with a restriction to an area of approximately 400 square miles. He mentioned the rearing of the insect in Massachusetts in 1916, its identification in 1917, and described the very serious injuries caused in 1918, giving special attention to the national phases and emphasizing the desirability of exterminating the pest if possible before it gets beyond control. He also called attention to the great difficulty of distinguishing between the larva of this pest and those of certain native stalk-boring Pyraustids.

Mr. Mutchler exhibited two drawers of Arizona beetles donated to the American Museum of Natural History by Mr. Davis. These were part of those collected some years ago by Dr. R. E. Kunze and sent by him to the late Charles Palm; they later passed into the keeping of Louis H. Joutel, who sold them for Dr. Kunze to Mr. Davis unmounted. Many of them have since been mounted and labelled by Mr. Shoemaker and are thus finally becoming available for study.

Mr. Mutchler also exhibited *Euryscelis suturalis*, found by Mr. Davis, April 10, 1912, at Everglade, Florida, and remarked upon its established West Indian distribution, including Andros Island, Bahamas (W. M. Mann), and the certainty that the New York record was based upon a specimen accidentally introduced in timber.

MEETING OF MARCH 18.

A regular meeting of the New York Entomological Society was held at 8:00 P.M., on March 18, 1919, in the American Museum of Natural History. Mr. Wm. T. Davis, chairman pro tem., with sixteen members and three visitors present.

Mr. John D. Sherman, Jr., was elected Vice-President in place of Mr. Edw. D. Harris, deceased.

Mr. Sherman exhibited and commented on "Some Unusual Entomological Pamphlets" including an early copy of the *Oölogist*, an early paper by Theodore Roosevelt, circulars (old series) of Dept. of Agriculture, 1884 to 1886, the Entomologists' Exchange of 1879, Belfrage price list from *Psyche Advertiser*, Lists published in 1873 by Dimmock, Sherman's lists of 1899 and earlier; Howard's S. C. List of 1883; Dr. Horn's Reply to C. V. Riley; Jaeger's 1853 List of N. Am. Insects; Panzer's reprint dated 1790 of Isaac Uddman's *Novae Ins. Sp.* first printed in 1753, one of Thunberg's *Diss. Novas. Ins. Sp.* dated 1781; Provancher's Additions and Corrections 1877-1879, the Willoughby Society's reprint of John R. Forster's first descriptions in 1771 and Townend Glover's cotton insects of which only 60 copies were printed. In reference to Leconte and Casey, Mr. Sherman said that of some of the papers by each author, no extras were ever printed, *e.g.*, Leconte's *Nomenclature*, Vancouver and Lake Superior papers and Casey's papers in *Ent. News* and *Can. Ent.*, making them hard to obtain.

In the discussion that followed Mr. Davis said that Jaeger's book was perhaps responsible for the statement, since often repeated, that some species of Cicada spent only two years underground, which he believed to be erroneous. Mr. Davis also mentioned that according to Dr. Schwarz the plates used in Glover's works were still in existence stored away in the Smithsonian Institute.

Mr. Leng exhibited for Mr. Bell specimens of *Sphenophorus pertinax*, with the basal part of the cattails in which they were found, cut open to show the chambers excavated by the larva; and read a letter from Mr. Bell giving further details. It was especially interesting to note that while the larvæ of the noctuid *Sphida obliqua* were also found in the cattail stalks it was always in a different part thereof. The excavation of these stalks by *Sphenophorus pertinax* larvæ has already been noticed in *Bull. No. 79, Univ. Ill. Agl. Exp. Sta., 1902, p. 452.*

Mr. Leng also read a paper on the "Sequence of Coleopterous Families" which will be printed elsewhere.

Dr. Harry H. Knight, present as a visitor, spoke of the Cornell Trans-continental Auto. Exp. and described especially their experiences in light collecting in the Arizona desert. A pyramid about three feet square at base and four feet high, made of cheese cloth, was used with a Prestolite tank and acetylene burner to supply light, the burner being inside the pyramid. The light was conspicuous a mile away and attracted great quantities of insects of all orders. Beetles were so numerous that it was necessary to remove them to have room for other orders on the cloth.

Dr. Lutz spoke of the advantages of the A tent he had used in Arizona, especially in its greater surface and portability.

Mr. Davis exhibited a living specimen of *Calosoma scrutator* found hibernating on Staten Island about an inch below the ground surface by a Mr. Franklin; also specimens taken in the Catskill Mountains of *Necrophilus*

pettiti, three specimens of *Cychrus*, *Brathinus nitidus*, *Cicindela ancocisconensis* and other Coleoptera, commenting upon the beetles collected there at sugar and in traps.

Mr. Notman said that he also had found *Cychrus* in traps in the Adirondacks, the species being *brevoorti*, at an elevation of 3,000 feet.

Mr. Mutchler exhibited, for Mr. Weiss, the larva of the European cornborer, *Pyrausta nubilalis*, and a photo of the placard issued in reference thereto by the Agricultural Department.

Mr. Burns exhibited *Platyichirus* entangled in red top grass (*Agrostis alba*) found by him at Watchogue, Staten Island, July 28.

MEETING OF APRIL 1.

A regular meeting of the New York Entomological Society was held at 8:00 P.M., April 1, 1919, in the American Museum of Natural History, with the Vice-President John D. Sherman, Jr., in the chair, and 26 members and three visitors present.

Dr. Bequaert, for the Field Committee, reported postponement of April 6 excursion to Flushing, until April 20, on account of late season.

Mr. Schaeffer, under the title "Remarks on the Clerid genus *Aulicus* Spin.," exhibited his collection and said that the single species in the Henshaw Check List, viz.: *A. nero* Spinola was described from Mexico and probably did not occur in the United States. Another Mexican species, *A. monticola*, has been taken in Alpine, Texas, by Prof. Wickham. *A. femoralis*, from Nogales, Ariz., since described, as well as several other undescribed species, have been confused with *nero*. As in *Cicindela*, there is much variation in the maculation which probably caused Dr. Horn, and others, to refer the different forms to *A. nero*. Specimens from New Mexico, Arizona, Texas, Nevada and Mexico had been obtained from various sources and none agreed with the description of *nero*. Mr. Schaeffer described the differences he had noted in the antennal club, which should be abruptly clubbed to agree with generic characters of *Aulicus*, but is in a few species actually dilated from the sixth or seventh joint; and in the claws which should be simple, but are more or less toothed in certain males, so that it became difficult to decide whether they should all be referred to *Aulicus* or new genera erected on characters possessed by the males only. Mr. Schaeffer reserved decision pending examination of more specimens.

Mr. Davis read "Collecting Notes from Gardiner's Island" and exhibited five boxes of specimens, many photographs, maps, etc., to illustrate his account of the locality. This island lies east of Long Island, N. Y., is about 5×3 miles, and contains two very old forests, a large pond, beaches, sand dunes, marsh, all preserved from desecration by thirteen generations of continuous ownership in one family. The following interesting insects were observed; 39 species of Orthoptera, among them *Amblycorypha floridana carinata* R. & H., which has never before been reported from the State of New York;

Pseudopomala brachyptera was also collected. The tiger beetles seen were *Cicindela hirticollis*, *purpurea*, *repanda*, *marginata*, *punctulata*, *sexguttata* and *tranquebarica*; other beetles included *Sphaeridium scarabaeoides*, *Helluomorpha bicolor*, *Nematodes penetrans*; butterflies and *Polistes* were rather scarce, but twenty-seven species of trees were listed.

Dr. J. Bequaert exhibited about 150 species of Hymenoptera and 50 species of Diptera collected on Gardiner's Island during his stay with Mr. Davis from August 17 to August 23 of last year. Mr. Davis's collecting of 1911 included several additional forms. A specimen of *Zethus spinipes* Say was taken by Mr. Davis on a previous visit to the Island. Other interesting species were among the Hymenoptera: *Methoca stygia* Say, *Philanthus politus* Say, *Psen chalcifrons* Packard, *Crabro provancheri* Fox, *Trypoxylon politum* Say, *T. tridentatum* Packard, *Nysson plagiatus* Cresson; *Epeolus lectoides* Robertson, *E. vernoniae* Cockerell, *Bombus separatus* Cresson, *B. pennsylvanicus* De Geer, *B. impatiens*, Cresson, *B. vagans* Smith; *Vespa maculata* Fabricius, *V. communis* de Saussure. Among the Diptera: *Spogostylum simson* Fabricius, *S. paper* Loew, *Anthrax tegminipennis* Say, *A. lateralis* Say, *Exoprosopa fascipennis* Say; *Tabanus nigrovittatus* Macquart, *Chrysops flavidus* Wiedemann, *C. vittatus* Wiedemann, *C. callidus* Osten Sacken.

MEETING OF APRIL 16.

A regular meeting of the New York Entomological Society was held at 8:00 P.M., in the American Museum of Natural History, April 15, 1919, Mr. Harry G. Barber in the chair, with 15 members and four visitors present.

Lt. W. J. Chamberlin, under the title "Collecting in the Blue Mountains of Oregon," gave an account of his work in 1914 in four different regions in Oregon, especially referring to forest insects, Buprestidæ, Cerambycidæ and Scolytidæ. First eight days were spent in the Florence region in Siuslaw Nat. Forest on the Pacific coast to determine the extent of damage done by the fire of 1866, which as far as insects were concerned, was found not to exceed 15 per cent. over ordinary mill loss, being chiefly done by Cerambycidæ working in the sapwood. Little incidental collecting could be done on account of heavy rain, but one new Scolytid was found. The rainfall averages 80 inches in this region, which is very rough country, broken by many ranges of the Coast Mountains, but of only 500 feet elevation and mild temperature, snow being almost unknown. Douglas fir is the typical tree, though Western Hemlock is quite common on the lower slopes and heavy underbrush is characteristic.

Next six weeks were spent in the Sumpter region, in the Blue Mountains of eastern Oregon, in the Whitman Nat. Forest. The altitudes range from 4,500 to 7,000 feet, rainfall is only 25 inches, but 6 feet of snow in winter and hard frost as late as June to indicate the greater severity of the climate. There is a large variety of trees with Lodgepole Pine predominant and insects are abundant, doing little damage to healthy trees, because there is plenty of dead timber, due to wind, etc., in which they work.

Dendroctonus monticola, *valens*, *Ips emarginatus*, *Tetropium velutinum*, were among the most important species.

Ten days were next spent in the Sparta region, also in the Blue Mountains, but nearer the eastern border of Oregon and in Minan National Forest. The country there is more open, with mountain parks and meadows. The Yellow Pine is predominant, but the meadow flowers attract many pollen feeders and make interesting collecting.

It was here that *Buprestis connexa* was found on yellow pine logs and *Melasis rufipennis* in a Grand Fir overthrown by the wind, from weakness caused by its attacks, which had penetrated to the center of its 18-inch trunk.

The fourth region visited was Detroit, in Marion County, and in the Cascade Mountains, mostly in the Santiam National Forest. The number of tree species found was greater than elsewhere. Douglas fir was again dominant, but Alaska and other cedars are not uncommon: pines, hemlocks, firs, juniper and yew also occur. The Cerambycid *Atimia dorsalis* was found in abundance on Alaska cedar, August 20, *Criocephalus productus* on Noble Fir, and many Buprestids and Scolytids, including new species since described by Swaine, Van Dyke and Lt. Chamberlin.

In reply to Mr. Dickerson, Lt. Chamberlin described the outfit he carried during his three months' exploration of these forests and explained that his collecting was done with his fingers and his axe.

Mr. Bird read a review of "Insects Injurious to Hop in New York" (Memoir No. 15, Cornell Univ. Agl. Exp. Sta.), which will be printed in full.

Mr. Bird also presented a *Cuterebra* fly, taken at Rye, N. Y., to the Local Collection.

Mr. Shoemaker recorded the capture of the Coccinellid *Adalia humeralis* Say on April 13, 1919, on a rosebush at 6916 17th Ave., Brooklyn, exhibiting a colored drawing thereof. In addition to the usual humeral and subsutural red spots, this specimen has the apex of each elytron red.

Mr. Burns exhibited the powder post beetle *Lyctus planicollis*, working in ash and called attention to the exceeding softness of the powder, which he said was used in some European countries for toilet purposes.

Mr. Davis exhibited the Proc. Ent. Soc. Br. Col., a new periodical.

MEETING OF MAY 6.

A regular meeting of the New York Entomological Society was held at 8:00 P.M., May 6, 1919, in the American Museum of Natural History, Mr. Harry G. Barber in the chair, with 13 members and two visitors present.

Dr. Bequaert, for the Field Committee, reported on the excursion to Flushing, L. I., on April 20; and on one for Decoration Day to Great Piece Meadow, N. J.

Dr. A. H. Sturtevant, of Columbia University, was proposed for membership by Mr. Mutchler, and, the by-laws having been suspended for the purpose, was immediately elected.

Mr. Notman exhibited 301 species "Coleoptera collected at Schoharie,

N. Y.," of which nine were undescribed or heretofore unrecorded from America, as well as many insects of other orders.

Mr. Mutchler spoke of "Genitalia of *Polyphylla*," exhibiting more than 50 dissected specimens and drawings of their genitalia by Mr. Olsen. He said the work started with an effort to identify the numerous specimens collected in Arizona and California by Dr. Lutz and Dr. Bequaert and with hopes that differences in genitalia would support the rather feeble superficial characters by which the species described since Leconte's time are differentiated. Thus far the result was not favorable to the retention of many names.

Mr. Burns exhibited *Tropea luna* var. *rubromarginata* Davis caught at Arrochar, Staten Island, May 2, 1919.

Mr. Davis said that *Papilio turnus* was seen near Oakwood, Staten Island, on April 22, 1919, while in company with Mr. Edw. J. Burns. The first record of 1918 was April 24, Palisade, N. J., mentioned in the minutes, XXVI, p. 232.

Mr. Gaudin said that he had seen a specimen even earlier; on April 19.

Mr. Davis exhibited *Pselliopsis barberi*, a hemipteron of which Dr. H. H. Knight had taken 76 at Springfield, Mo., on trunks of sycamore, and an allied species, pointing out the differences and early date of appearance and mating.

Mr. Davis also exhibited Orthoptera from Philippine Islands, received through the kindness of Professor Funkhouser.